ecology and environment, inc.
101 YESLER WAY, SEATTLE, WASHINGTON, 98104, TEL. 206/624-9537
International Specialists in the Environment

MEMORANDUM

DATE: December 13, 1988

TO: David Bennett, HWD, USEPA, Region X

THRU: Jeffrey Villnow, FIT-OM, E&E, Seattle

FROM: Thomas Colligan, FIT-PM, E&E, Seattle

SUBJ: Preliminary HRS Score
American Tar Company
Spokane, Washington

REF: TDD F10-8808-10
PAN FWA0594SA

CC: John Osborn, FIT-RPO, USEPA, Region X

A revised preliminary HRS score was computed for the American Tar Company site. The revision to the original score, submitted on November 17, 1988, was based on a consideration of seasonal rainfall in the Spokane area of +5.2 inches (measured from November 1 to April 30). This revision resulted in an HRS value of 2 for net precipitation and a concominant increase in the hazard migration mode score to 22.15 from 17.68.

TC:csr

Enclosures

ecology and environment, inc.

101 YESLER WAY, SEATTLE, WASHINGTON, 98104, TEL. 206/624-9537

International Specialists in the Environment

MEMORANDUM

DATE: December 13, 1988

TO: John Osborn, FIT-RPO, USEPA, Region X

THRU: Jeffrey Villnow, FIT-OM, E&E, Seattle

FROM: Thomas Colligan, FIT-PM, E&E, Seattle

SUBJ: Final Site Inspection Report
American Tar Company
Spokane, Washington

REF: TDD F10-8808-10
PAN FWA0594SA

CC: Deborah Flood, HWD-SM, USEPA, Region X

Transmitted herewith are two (2) sets of revised pages for the American Tar Company Site Inspection Report incorporating EPA comments. This report will be considered final.

Please note that these revisions also resulted in a revision of the preliminary HRS score submitted on November 17, 1988. These revisions are addressed in separate memoranda.

TC:csr

Enclosures

ecology and environment, inc.
101 YESLER WAY, SEATTLE, WASHINGTON, 98104, TEL. 206/624-9537
International Specialists in the Environment

MEMORANDUM

DATE: November 17, 1988

TO: David Bennett, HWD, USEPA, Region X

THRU: Jeffrey Villnow, FIT-OM, E&E, Seattle

FROM: Thomas Colligan, FIT-PM, E&E, Seattle

SUBJ: Preliminary HRS Score
American Tar Company
Spokane, Washington

REF: TDD F10-8808-10
PAN FWA0594SA

CC: John Osborn, FIT-RPO, USEPA, Region X

A preliminary EPA Hazard Ranking System (HRS) score was computed for the American Tar Company Site based on data reviewed during the Site Inspection. As indicated in the attached table and score sheets, a preliminary hazard migration mode score of 17.68 was calculated based on known information and, when necessary, professional assumptions.

The score would increase to 38 if an observed release to groundwater could be documented. The probability of documenting a groundwater release is presumed low, however, because of the nature of the wastes at the site and the properties of the aquifer.

Aside from the risk of direct exposure, there does not appear to be any additional HRS II concerns to warrant scoring the site at a later date.

TC:csr

Enclosures

SUMMARY OF EPA HAZARD RANKING SYSTEM (HRS) INFORMATION AVAILABLE AND REQUIRED

Rating Factor	Preliminary HRS Data [1]	HRS Value	References [2]	Comments
Ground Water Route Characteristics				
Observed Release (yes/no)				
Aquifer Depth	25-50 feet	2	WDOE Well Logs	
Net Precipitation	-10"	0	HRS User's Manual	
Vadose Zone Permeability	Sandy Alluvium	2	Site Visit	
Physical State of Waste	Unstabilized solid	1	Assumption	
Containment	None	3	Assumption	
Ground Water Use	Only source	3	Washington Public Water Supply Listing	
Distance to Nearest Well	~ 0.8 miles	3	Washington Public Water Supply Listing	
Population Served	> 100,000	5	Washington Public Water Supply Listing	
Surface Water Route Characteristics				
Observed Release (yes/no)	No surface water score - wastes buried and in solid form.			
Facility Slope	<3%	0	Site Visit	
Intervening Terrain Slope	<3%	0	Site Visit	
1-Year 24-Hour Rainfall	1.5"	1	HRS	
Distance to Nearest Water	0.05 miles	3	Site Visit	
Physical State of Waste	Unstabilized solid	1	Assumption	
Containment	Buried	0	Site Visit	
Surface Water Use	Recreational	2	Washington Public Water Supply Listing	
Distance to Sensitive Environment	1-2 miles	0	Dept. of Fish & Wildlife-Wetlands Inventory	
Population Served	0	0	Washington Public Water Supply Listing	
Distance to SW Intake	>3 miles	0	N/A	
Air Route Characteristics				
Observed Release (yes/no)	No air route considered - wastes buried, if any.			
Waste Reactivity/Incompatibility				
Population Within Four-Mile Radius				
Land Use				
Waste Characteristics	Coal tar is composed of polycyclic organic compounds - high toxicity and persistance.			
Toxicity	Maximum	3		
Persistence	Maximum	3		
Quantity	Unknown	1		
Migration Hazard Mode Score (Sm)		17.68		

1. Uses known/documented values, as indicated by the listed references.
2. See References following Section 4.0 in the Field Operations Work Plan.
3. Potential methods of acquiring missing HRS data within budget and schedule limitations of a typical Screening Site Inspection. For those data gaps requiring sampling, the reader is referred to Sections 3.0 and 4.0 of the Field Operations Work Plan.

PREDECISIONAL:
NOT FOR RELEASE

Facility name: American Tar Company

Location: Savannah GA

EPA Region: X

Person(s) in charge of the facility: INACTIVE FACILITY

Name of Reviewer: T. Colligan (E&E) Date: 10/6/88

General description of the facility:

(For example: landfill, surface impoundment, pile, container; types of hazardous substances; location of the facility; contamination route of major concern; types of information needed for rating; agency action, etc.)

Site is the location of former Tar refining and reprocessed coal Tar manufacture by adjacent coal gasification plant

Scores: S_M = Score 17.68 (ASSUME OBS. RELEASE TO GW) Tar Score = 38

S_{FE} =

S_{DC} =

HRS COVER SHEET

No sampling done

Most wells > 50' deep

2 Total precip. 22" Evap = 30"

3 Assume sand layers from Coastal Plain Aluvium

Coal Tar = viscous semi solid

No containment

Assume PAH compounds in Tar
Highly persistant, Highly Toxic
~ Unknown

Sole source aquifer (Spstem?)

Nearest well ~0.8 mile away
Well system serves 100,000

Ground Water Route Work Sheet					
Rating Factor	Assigned Value (Circle One)	Multiplier	Score	Max. Score	Ref. (Section)
[1] Observed Release	(0) 45	1		45	3.1
If observed release is given a score of 45, proceed to line [4]. If observed release is given a score of 0, proceed to line [2]					
[2] Route Characteristics					3.2
Depth to Aquifer of Concern	0 1 (2) 3	2	4	6	
Net Precipitation	(0) 1 2 3	1	0	3	
Permeability of the Unsaturated Zone	0 1 (2) 3	1	2	3	
Physical State	0 (1) 2 3	1	1	3	
Total Route Characteristics Score			7	15	
[3] Containment	0 1 2 (3)	1	3	3	3.3
[4] Waste Characteristics					3.4
Toxicity/Persistence	0 3 6 9 12 15 (18)	1	18	18	
Hazardous Waste Quantity	0 (1) 2 3 4 5 6 7 8	1	1	8	
Total Waste Characteristics Score			19	26	
[5] Targets					3.5
Ground Water Use	0 1 2 (3)	3	9	9	
Distance to Nearest Well/Population Served	0 4 6 8 10 / 12 16 18 20 / 24 30 32 (35) 40	1	35	40	
Total Targets Score			44	49	
[6] If line [1] is 45, multiply [1] x [4] x [5] If line [1] is 0, multiply [2] x [3] x [4] x [5]			17,556	57,330	
[7] Divide line [6] by 57,330 and multiply by 100		S_{gw} =	30.6		

GROUND WATER ROUTE WORK SHEET

No surface water route - Waste material is buried, if any

Surface Water Route Work Sheet						
Rating Factor	Assigned Value (Circle One)	Multiplier	Score	Max. Score	Ref. (Section)
1 Observed Release	0 45	1		45	4.1
If observed release is given a value of 45, proceed to line 4. If observed release is given a value of 0, proceed to line 2.					
2 Route Characteristics					4.2
Facility Slope and Intervening Terrain	0 1 2 3	1		3	
1-yr. 24-hr. Rainfall	0 1 2 3	1		3	
Distance to Nearest Surface Water	0 1 2 3	2		6	
Physical State	0 1 2 3	1		3	
Total Route Characteristics Score				15	
3 Containment	0 1 2 3	1		3	4.3
4 Waste Characteristics					4.4
Toxicity/Persistence	0 3 6 9 12 15 18	1		18	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	1		8	
Total Waste Characteristics Score				26	
5 Targets					4.5
Surface Water Use	0 1 2 3	3		9	
Distance to a Sensitive Environment	0 1 2 3	2		6	
Population Served/Distance to Water Intake Downstream	0 4 6 8 10 12 16 18 20 24 30 32 35 40	1		40	
Total Targets Score				55	
6 If line 1 is 45, multiply 1 x 4 x 5. If line 1 is 0, multiply 2 x 3 x 4 x 5				64,350	
7 Divide line 6 by 64,350 and multiply by 100	S_{SW} = 0				

SURFACE WATER ROUTE WORK SHEET

No Air route possible, waste buried, if any

Air Route Work Sheet						
Rating Factor	Assigned Value (Circle One)		Multiplier	Score	Max. Score	Ref. (Section)
1 Observed Release	0	45	1		45	5.1
Date and Location:						
Sampling Protocol:						
If line 1 is 0, the S_a = 0. Enter on line 5. If line 1 is 45, then proceed to line 2.						
2 Waste Characteristics						5.2
Reactivity and Incompatibility	0 1 2 3		1		3	
Toxicity	0 1 2 3		3		9	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8		1		8	
Total Waste Characteristics Score					20	
3 Targets						5.3
Population Within 4-Mile Radius	0 9 12 15 18 21 24 27 30		1		30	
Distance to Sensitive Environment	0 1 2 3		2		6	
Land Use	0 1 2 3		1		3	
Total Targets Score					39	
4 Multiply 1 x 2 x 3					35,100	
5 Divide line 4 by 35,100 and multiply by 100				S_a =		

AIR ROUTE WORK SHEET

	S	S^2
Groundwater Route Score (S_{gw})	30.6	
Surface Water Route Score (S_{sw})		0
Air Route Score (S_a)	2	0
$S_{gw}^2 + S_{sw}^2 + S_a^2$		
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2}$		30.6
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2} / 1.73 = S_M =$		17.68

WORKSHEET FOR COMPUTING S_M

(14)

EPA — POTENTIAL HAZARDOUS WASTE SITE DISPOSITION

REGION: 10 | SITE NUMBER: WAD981766225

File this form in the regional Hazardous Waste Log File and submit a copy to: U.S. Environmental Protection Agency; Site Tracking System; Hazardous Waste Enforcement Task Force *(EN-335)*; 401 M St., SW; Washington, DC 20460.

I. SITE IDENTIFICATION

A. SITE NAME	B. STREET	
American Tar Company	North 111 Erie Street	
C. CITY	D. STATE	E. ZIP CODE
Spokane	WA	99202

II. TENTATIVE DISPOSITION

Indicate the recommended action*(s)* and agency*(ies)* that should be involved by marking 'X' in the appropriate boxes.

RECOMMENDATION	MARK 'X'	ACTION AGENCY: EPA	STATE	LOCAL	PRIVATE
A. NO ACTION NEEDED -- NO HAZARD					
B. INVESTIGATIVE ACTION(S) NEEDED *(If yes, complete Section III.)*	X				
C. REMEDIAL ACTION NEEDED *(If yes, complete Section IV.)*					
D. ENFORCEMENT ACTION NEEDED *(If yes, specify in Part E whether the case will be primarily managed by the EPA or the State and what type of enforcement action is anticipated.)*					

E. RATIONALE FOR DISPOSITION / SOURCES OF INFORMATION

Presence of coal tar residue noted at site. Also, coal tar from adjacent Spokane coal mfg. site was refined at American Tar site into a variety of products. Potential exists for public health/environmental damage. RSOB / See PA.

F. INDICATE THE ESTIMATED DATE OF FINAL DISPOSITION *(mo., day, & yr.)*

G. IF A CASE DEVELOPMENT PLAN IS NECESSARY, INDICATE THE ESTIMATED DATE ON WHICH THE PLAN WILL BE DEVELOPED *(mo., day, & yr.)*

H. PREPARER INFORMATION

1. NAME	2. TELEPHONE NUMBER	3. DATE *(mo., day, & yr.)*
Deborah Frood	442-2722	5/7/87

III. INVESTIGATIVE ACTIVITY NEEDED

A. IDENTIFY ADDITIONAL INFORMATION NEEDED TO ACHIEVE A FINAL DISPOSITION.

B. PROPOSED INVESTIGATIVE ACTIVITY *(Detailed Information)*

1. METHOD FOR OBTAINING NEEDED ADDITIONAL INFO.	2. SCHEDULED DATE OF ACTION *(mo,day, & yr)*	3. TO BE PERFORMED BY *(EPA, Contractor, State, etc.)*	4. ESTIMATED MANHOURS	5. REMARKS
a. TYPE OF SITE INSPECTION (1)				
(2)				
(3)				
b. TYPE OF MONITORING (1)				
(2)				
c. TYPE OF SAMPLING (1)				
(2)				

EPA Form T2070-4 (10-79)

Continue On Reverse

AUG 0 3 1987

HW-113

Richard Brown
North 111 Erie Street
Spokane, Washington 99202

Dear Mr. Brown:

The Environmental Protection Agency (EPA), through its contractor Ecology and Environment (E&E), has completed the preliminary assessment (PA) reports compiled for the former Spokane Gas Manufacturing and the former American Tar Company sites in Spokane, Washington. Copies of the reports are enclosed. These reports are being sent to you since you are the owner of the former gas manufacturing property and you currently operate on the former American Tar site. I am also providing a copy of the PA for the former American Tar property to the current property owner, Burlington Northern, as well as the past property owner/operator, American Tar.

Based on these PAs, further investigation is recommended at the American Tar site. The outcome of such investigation will be evaluated by EPA before conducting any further activity at the former Spokane Gas Manufacturing site. These recommendations are outlined in each report on page six.

A site inspection has not yet been scheduled. EPA will work with you and Burlington Northern to schedule further investigation. If you have any questions, please telephone me at (206) 442-2722.

Sincerely,

Deborah Flood
Environmental Protection Specialist
Superfund Program

Enclosure

cc: Walter D. Farrel, Burlington Northern, Spokane
Emily Ray, Washington Department of Ecology, Olympia
Sherman Spencer, Ecology, Eastern Region
David Distler, American Tar Company

M.Anderson P.C. 0935P 7/24/87
8/3/87